



# Laboratories and Equipment

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## Department of Microbiology

### PCR (Automated Thermal Cycler)

Used to rapidly to make millions to billions of copies of specific DNA sample and to diagnose infection.



### UV - Visible Spectrophotometer

Analytical instrument used to quantitatively measure the compounds like protein, DNA or RNA, growth of bacterial cells, etc.





### **Cooling Centrifuge**

This equipment is used to isolate & separate suspensions. It additionally provides the cooling mechanism to maintain the uniform temperature throughout the practical.



### **Trinocular Microscope**

Bright field / Dark field / phase contrast Lenses Photographic recording during direct visual observation.





## Laminar Airflow Chamber

Used for transfer of medium & inoculation in a Microorganism free environment



## Incubator with shaker

Combination of incubation & shaking functions

It is used in cell culture, fermentation, hybridization, etc. which require a high quality of temperature control & shaking speed.



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### Deep Freezer

It is designed to maintain sub-zero temperature and hence used to preserve and store medical equipment, practical kits, samples, chemicals for a long period of time.





## Department of Physics

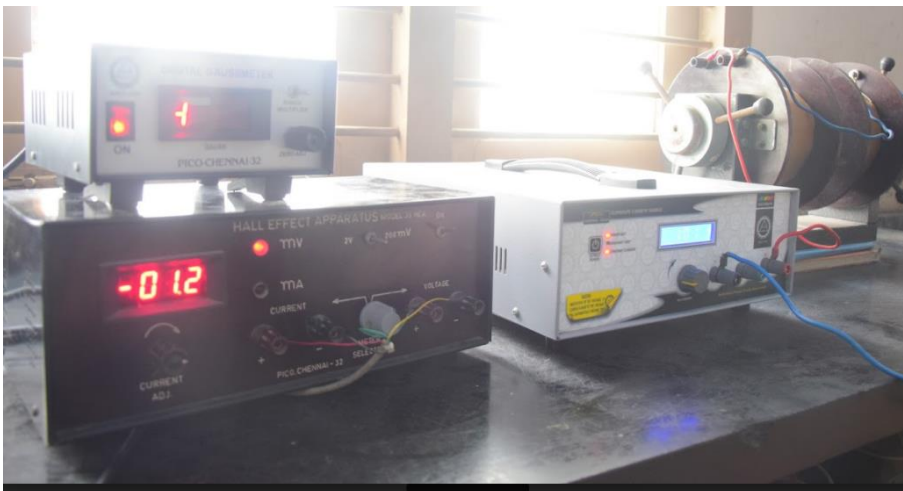
### Spectrum Photograph

It is an instrument for dispersing radiation into a spectrum and recording or mapping of the spectrum.



### Hall Effect Apparatus

It is used to determine the both sign of the charge carriers, (Electron, Holes) and their density in the given sample





### **Microprocessor Kit**

The microprocessor is a central unit of a computer system that performs arithmetic and logic operations which generally include adding, subtracting and transforming number from one area to another and comparing two numbers.



### **Guoy Balance**

It measures the apparent change in the mass of the sample and this method measuring the force on the sample by the magnetic field. It determines the magnetic susceptibility.







### **Digital Balance**

When a weight is applied digital balance, an electronic circuit generates a current which is then converted into a digital readout on the display



### **Fourprobe Apparatus**

It is used to measure the accurate resistivity of the samples. It overcomes the problem of contact resistance and also offer several other advantages





## Spectrometer

It is a device for measuring wavelengths of a light over a wide range of the electromagnetic spectrum. It's widely used for spectroscopy analysis of sample materials



## LDR - Light Dependent Resistor

Photo resistors also known as Light Dependent Resistor (LDR) are light sensitive devices most often used to indicate the presence or absence of light and to measure the light intensity





## Department of Fashion Technology

### Automatic Computerized Embroidery Machine

This machine is inbuilt with CAD/CAM technology to create embroidery from computerized design on saree, blouse or any garment



### Cloth tensile strength tester

This machine determines a wide range of materials in tension, bursting, tear, elongation, constant load and other mechanical properties





### **Drape meter**

The instrument has played significant role in providing graceful aesthetic effects in garments



### **Lea tester**

The tester measures the strength of one lea yarn and force necessary to break a material and is measured in pound





### **Abrasion tester**

The intent of abrasion tester is to produce data that will reproducibly rank material in their resistance to scratching abrasion under a specific set of conditions



### **Single Yarn Strength tester**

This tester determines the breaking strength and elongation of single cotton, wool and other yarns up to 50N





## **CAD (Tuko CAD Software)**

Fashion CAD pattern making software with advanced functionality & process engineering to empower accurate pattern making & marker planning



## **Department of Biochemistry**

### **Cooling centrifuge**

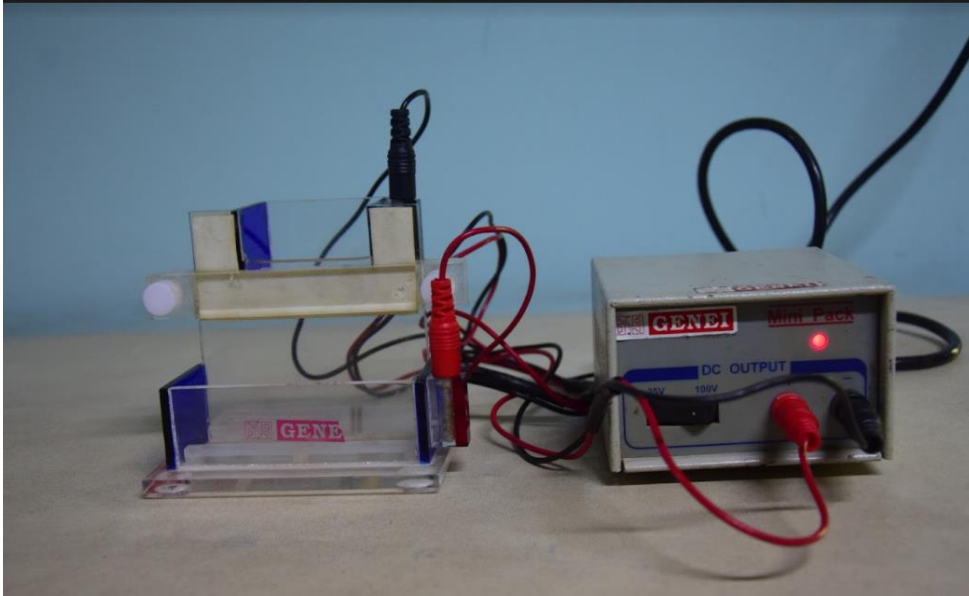
Provides cooling mechanisms to maintain the uniform temperature throughout the process of separation and isolation of suspensions





## SDS PAGE

The SDS Page is used for the separation of macromolecules under an electric field



## UV - Visible Spectrophotometer

It is Used for the quantitative analysis of compounds in solution based on the amount of UV/Visible light absorbed by the solution



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### Flame photometer

Used to quantify the concentration of metal ions like sodium, potassium, lithium, calcium and caesium in samples by measuring the emitted light intensity when introduced into the flame

